



## PATENT ABSTRACTS OF JAPAN

(11) Publication number: **10014125 A**

(43) Date of publication of application: 16.01.98

(51) Int. Cl.  
**H02J 7/10**  
**G01R 31/36**  
**H01M 10/44**  
**H01M 10/44**  
**H01M 10/48**

(21) Application number: **08164597**(22) Date of filing: **25.06.96**(71) Applicant: **MATSUSHITA ELECTRIC IND CO LTD**(72) Inventor: **GOI YASUO**  
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(54) **METHOD AND DEVICE FOR CHARGING  
 NICKEL-CADONIUM OR NICKEL-HYDROGEN  
 SECONDARY BATTERY**

(57) Abstract:

**PROBLEM TO BE SOLVED:** To make it possible to fully charge a nickel-cadonium or nickel- hydrogen secondary battery even if charging is started with a battery temperature near the upper limit point of a charging allowable temperature range.

**SOLUTION:** At all times during charging, a battery voltage is detected by a voltage detecting circuit 7 and a battery temperature is detected by a thermistor 4 and a temperature detecting circuit 8. Based on the detected voltage and temperature signals, a charging controlling circuit 12 calculates a rapid charging current value and the optimum charging time which correspond to the battery temperature, in each charging. A current select circuit 14 sets the charging current value in a variable constant current controlling circuit 15, which supplies current the most suitable for the battery temperature to a nickel- cadonium battery 2 and suppresses generation of heat of the battery during rapid charging.

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